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**United States Patent** [19]

Nakane et al.

[11] **Patent Number:** 5,935,832[45] **Date of Patent:** Aug. 10, 1999[54] **FARNESYL DIPHOSPHATE SYNTHASE**

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**ABSTRACT**

A mutant prenyl diphosphate synthase capable of synthesizing prenyl diphosphates, shorter than those synthesized by the original enzyme, by modifying the amino acid sequence in and upstream of the aspartic acid-rich domain DDXX (XX)D (X denotes any amino acid, and XX in the parentheses may not be present) present in region II of the prenyl diphosphate synthase.

**16 Claims, 3 Drawing Sheets**

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